Work Order ID 101515

May-13-13 1:03:36 PM

101515

Item ID: D3262-041 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Canister Assembly

Start Date: 5/13/13 **Start Qty:** 2.00 *2* **Cust Item ID:**

Required Date: 5/30/13 **Req'd Qty:** 2.00 *2* **Customer:**

Reference:

Run Start *NR1*

Approvals: **Process Plan:** MLS **Date:** 13-05-16 **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
D3262	Rev E

100 Weld per dwg A/R Aluminum rod Batch: 1412857 0.00

100

Large Fab

Large Fab

Memo 0.00

Large Fab

Weld canister assembly as per Dwg D3262 using DT8739 to align fillings

1 E 13-7-10

110 QC9- Inspect visual per QSI004- Fusion Welds 0.00

110

QC

Quality Control

Memo 0.00

1 13-07-10 DAS 09 9-89

120 QC5- Inspect part completeness to step on W/O 0.00

120

QC

Quality Control

Memo 0.00

Pressure test as per Dwg D3262

1 13-07-10 DAS 09 9-89

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

_____

Work Order ID 101515

May-13-13 1:03:36 PM

101515

Item ID: D3262-041 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Canister Assembly

Start Date: 5/13/13 **Start Qty:** 2.00 *2*

Required Date: 5/30/13 **Req'd Qty:** 2.00 *2*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Chemical Conversion Coat per QSI005 4.1	0.00							
130									
HandFinish	**Memo**	0.00							
Hand Finishing						1X	ø	M.J	13/07/11
140	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
140									
Powdercoat	**Memo**	0.00							
Powder Coating	****Ensure to mask threads****								
	START TIME: 8:50								
	OVEN TEMPERATURE: 320°F								
	FINISH TIME: 9:20								
WI25620						1X	ø	M.J	13/07/11
150	QC3- Inspect Part Finish	0.00							
150									
QC	**Memo**	0.00							
Quality Control						1X	ø	MJ	13/07/11

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

_____

_____

_____

Work Order ID 101515

May-13-13 1:03:36 PM

101515

Item ID: D3262-041 **Accept** *N900040100* **Setup Start** *NS1*

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Item Name: Canister Assembly

Start Date: 5/13/13 **Start Qty:** 2.00 *2*

Required Date: 5/30/13 **Req'd Qty:** 2.00 *2*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: STH84	0.00							
160						1X	M.M. 13-07-11		
Packaging	**Memo**	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170							13/7/17		
QC	**Memo**	0.00							
Quality Control									

13-07-12

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

_____

Picklist Print

May-13-13 1:03:36 PM

Work Order ID: 101515

Parent Item: D3262-041 **Start Date:** 5/13/13 **Required Date:** 5/30/13

Parent Item Name: Canister Assembly **Start Qty:** 2.00 **Required Qty:** 2.00

Comments: IPP C05.03.10Removed P/O for liquid penetrant inspectionKJ/JLM IPP Rev:D as per ECN10-571 DD 10.05.10 verified :EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3262-1 Tube		Manufactured	No			100	Each	1.0000	1	2	2	13-7-10	
				Location		**Loc Qty**		**Loc Code**					
				LG011		1							
				95405		1				1			
D3262-3 Cap		Manufactured	No			100	Each	2.0000	2	4	2	13-7-10	
				Location		**Loc Qty**		**Loc Code**					
				WA003		2							
				93818		2				2			

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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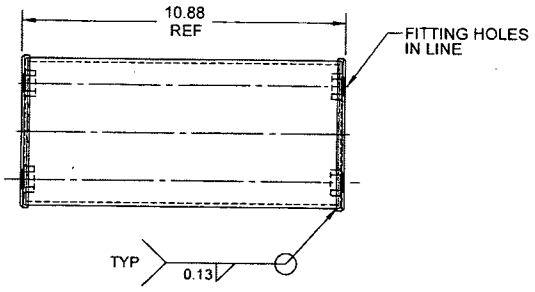
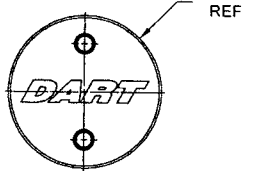
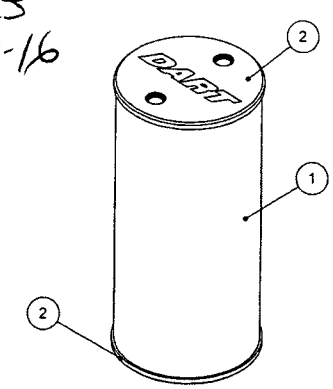
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

ITEM	QTY -041	P/N	DESCRIPTION
	X	D3262-041	CANISTER ASSEMBLY
1	1	D3262-1	TUBE
2	2	D3262-3	CAP

101515 MCJ
13-05-16







RELEASED
2010 -05- 07

D3262-041 CANISTER ASSEMBLY

NOTES:
1) MATERIAL: N/A
2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3262-041" AND B/N USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 2.51 lbs
8) LIQUID PENETRANT INSPECT PER ASTM E1417 LEVEL 1 OR
PRESSURIZE TO 10 psi AND SUBMERGE UNDER WATER TO CHECK FOR LEAKS

REV.	DESCRIPTION	BY	DATE
E	0.25 WAS 0.45 (ZNC7-4, C7-5); 0.13 WAS 0.33 (ZN B7-4, B7-5); ADD DIMENSION (ZN B1-4, D1-5, B1-5)	RF	10.05.03
D	ADD D3262-043/-5 (ZN B5-2; B5-5); REVISE DIMENSIONS TO EQUAL TOOL DIMENSIONS (ZN B2-4; C2-4) PER CAR 09-004	RF	09.12.30
C	Ø5.165 WAS Ø5.190	RF	06.08.31
B	ADD PRESSURE TESTING OPTION	MB	05.02.14
A	NEW ISSUE	RF	04.05.06

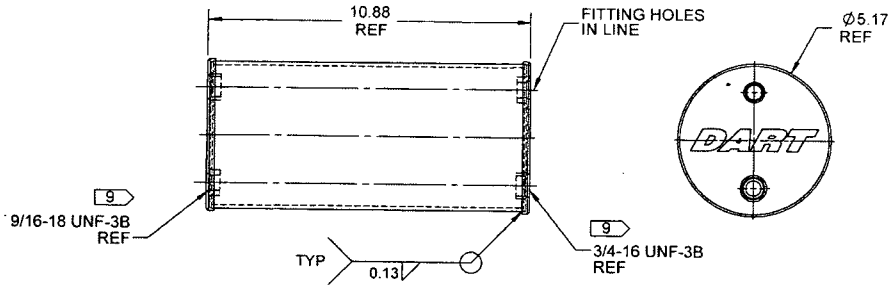
DESIGN	RF
DRAWN	RF
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	10.05.03

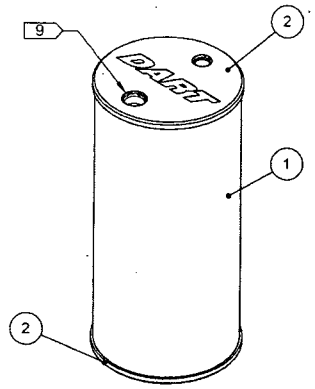
DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D3262 REV. E
SHEET 1 OF 5
TITLE FUEL PURGE CANISTER
SCALE NTS

101515

ITEM	QTY -043	P/N	DESCRIPTION
	X	D3262-043	CANISTER ASSEMBLY
1	1	D3262-1	TUBE
2	2	D3262-5	CAP





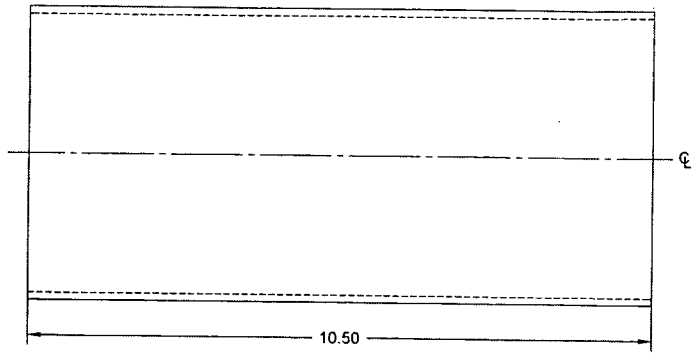
D3262-043 CANISTER ASSEMBLY

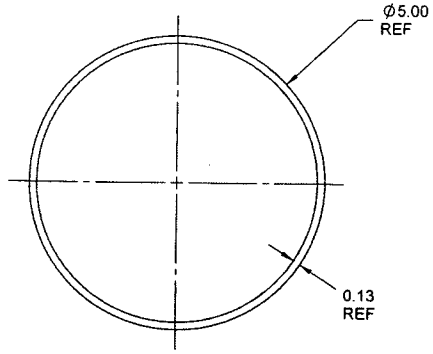
RELEASED
2010 -05- 07

NOTES:
1) MATERIAL: N/A
2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3262-043" AND B/N USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 2.50 lbs
8) LIQUID PENETRANT INSPECT PER ASTM E1417 LEVEL 1 OR
PRESSURIZE TO 10 psi AND SUBMERGE UNDER WATER TO CHECK FOR LEAKS
9) WELD CAPS WITH 3/4-16 TAP TOP HOLE IN LINE WITH 9/16-18 TAP BOTTOM HOLE

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. E
MFG. APPR.		D3262 SHEET 2 OF 5
APPROVED		TITLE SCALE
DE APPR.		FUEL PURGE CANISTER NTS
DATE	10.05.03	

101515





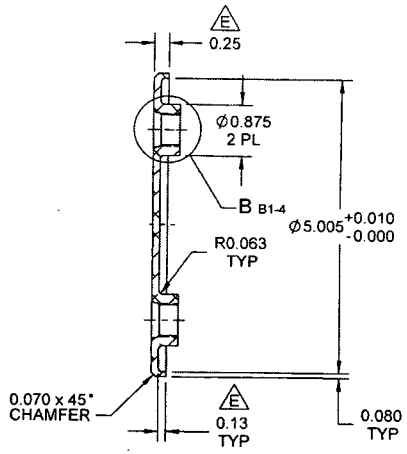
D3262-1 TUBE

RELEASED
2010 -05- 07

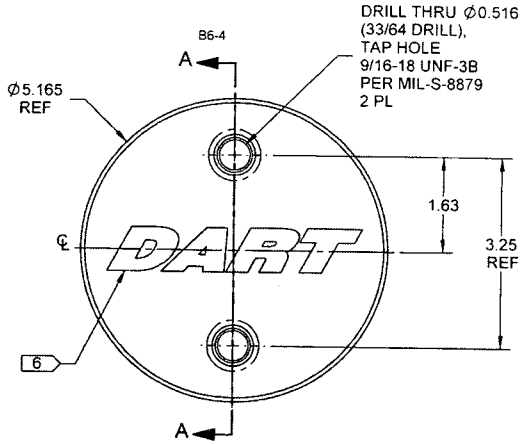
NOTES:
1) MATERIAL: 6061-T6 OR 6061-T62 ALUMINUM TUBING, 5.00 OD x 0.125 WALL
PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A-225/8
REF. DART SPEC. M6061T6T5.000W.125
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 1.96 lbs
8) PART IS SYMMETRICAL ABOUT CENTERLINE

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D3262 REV. E
MFG. APPR.		SHEET 3 OF 5
APPROVED		TITLE FUEL PURGE CANISTER SCALE NTS
DE APPR.		
DATE	10.05.03	

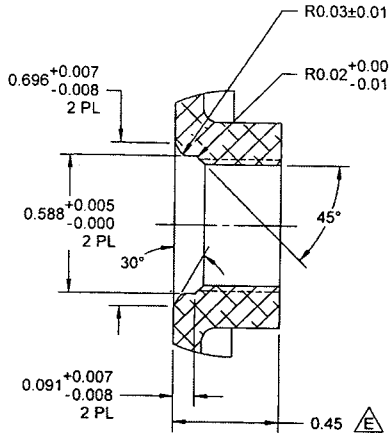
101515



SECTION A-A C5-4



D3262-3 CAP

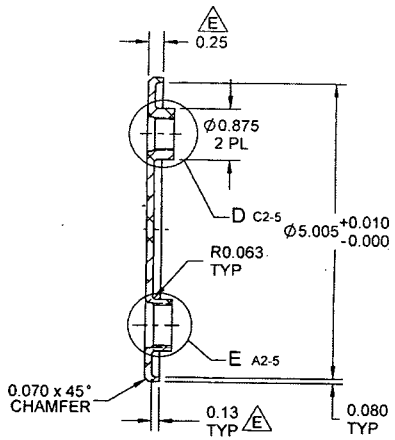


DETAIL B C7-4
SCALE 2X

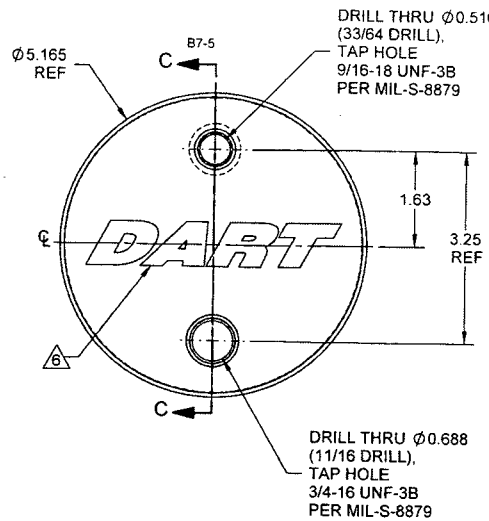
RELEASED
2010 -05- 07

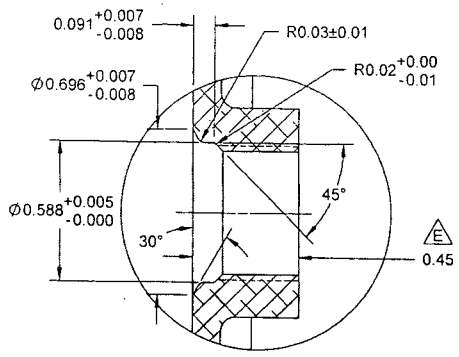
NOTES:
1) MATERIAL: 6061-T6/T651 ALUMINUM BAR
PER QQ-A-200/8 OR QQ-A-225/8
REF. DART SPEC. M6061T6B
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: ENGRAVE 'DART' LOGO AS SHOWN USING 0.75 HIGH x 0.010 DEEP (MAX) LETTERS WITH TOOL RADIUS OF 0.25 MIN
7) WEIGHT: 0.28 lbs
8) PART IS SYMMETRICAL ABOUT CENTERLINE

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	DRAWING NO. D3262 REV. E
CHECKED		SHEET 4 OF 5
MFG. APPR.		TITLE FUEL PURGE CANISTER SCALE NTS
APPROVED		
DE APPR.		
DATE	10.05.03	

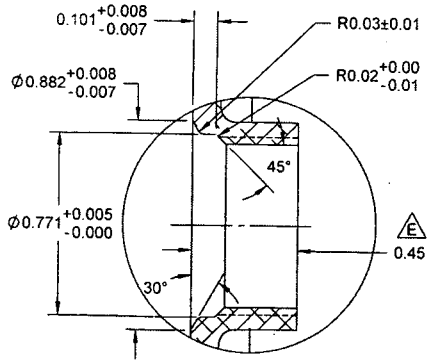


SECTION C-C D5-5





DETAIL D C7-5
SCALE 2X



DETAIL E B7-5
SCALE 2X

D3262-5 CAP

NOTES:
1) MATERIAL: 6061-T6/T651 ALUMINUM BAR
PER QQ-A-200/8 OR QQ-A-225/8
REF. DART SPEC. M6061T6B
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: ENGRAVE 'DART' LOGO AS SHOWN USING 0.75 HIGH x 0.010 DEEP (MAX) LETTERS WITH TOOL RADIUS OF 0.25 MIN
7) WEIGHT: 0.27 lbs
8) PART IS SYMMETRICAL ABOUT CENTERLINE

RELEASED
2010 -05- 07

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3262	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FUEL PURGE CANISTER	NTS
DATE	10.05.03		